

RECEIVED

MAY 30 2002

DIVISION OF
OIL, GAS AND MINING

Submit in quadruplicate

DESIGNATION OF AGENT

Supervisor, Oil and Gas Operations:

The undersigned is, on the records of the Bureau of Land Management, the Unit Operator under the Bryson Canyon Unit Agreement, Grand County, Utah, approved October 1, 1960, hereby designates:

Lone Mountain Production Company
P. O. Box 80965
Billings, MT 59108-0965

as its agent, with full authority to act in its behalf in complying with the terms of the Unit Agreement and regulations applicable thereto, and on whom the supervisor or their representative may serve written or oral instructions in securing compliance with the Oil and Gas Operating Regulations with respect to drilling, testing, and completing unit well No. 19, in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 16, T17S, R24E, S.L.M. (Bottom hole), NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 15, T17S, R24E, S.L.M. (Surface location), Grand County, Utah.

It is understood that this designation of agent does not relieve the Unit Operator of responsibility for compliance with the terms of the Unit Agreement and the Oil and Gas Operating Regulations. It is also understood that this designation of agent does not constitute an assignment of any interest under the Unit Agreement or any lease committed thereto;

In case of default on the part of the designated agent, the Unit Operator will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or their representative.

The Unit Operator agrees promptly to notify the Oil and Gas Supervisor of any change in the designated agent.

This designation of agent is deemed to be temporary and in no manner a permanent arrangement.

This designation is given only to enable the agent herein designated to drill the above-specified unit well. Unless sooner terminated, this designation shall terminate when there is filed in the appropriate district office of the Bureau of Land Management a completed file of all required Federal reports pertaining to the subject well. It is also understood that this designation of agent is limited to field operations and does not cover administrative action requiring specific authorization of the Unit Operator.

TREND OIL COMPANY

Date: 5/14/02By: H. W. Dougherty
H. W. Dougherty, Unit OperatorAPPROVED - EFFECTIVE MAY 28 2002

[Signature]
CHIEF, BRANCH OF FLUID MINERALS
BUREAU OF LAND MANAGEMENT

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

June 3, 2002

Memorandum

To: Assistant District Manager Minerals, Moab District

From: Michael Coulthard, Petroleum Engineer

Subject: 2002 Plan of Development Bryson Canyon Unit,
Grand County, Utah.

We have received a Designation of Agent from Lone Mountain Production Oil and Gas Company to Trend Oil Company to drill the following well in calendar year 2002 within the Bryson Canyon Unit, Grand County, Utah.

Producing Zone - Dakota

Well	Bottom Hole Location
------	----------------------

19	Sec. 16, T17S, R24E 0600 FNL 0600 FEL
----	---------------------------------------

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File - Bryson Canyon Unit
Division of Oil Gas and Mining
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:6-3-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

001

5. Lease Serial No. ML 3323
6. If Indian, Allottee or Tribe Name N/A
7. If Unit or CA Agreement, Name and No. Bryson Canyon Unit
8. Lease Name and Well No. Bryson Canyon Unit No. 19
9. API Well No. 43-019-31392
10. Field and Pool, or Exploratory
11. Sec., T., R., M., or Bk. and Survey or Area NENE Sec. 16, T17S, R24E
12. County or Parish Grand
13. State UT
14. Distance in miles and direction from nearest town or post office* 33 Miles from Mack, Colorado
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drilg. unit line, if any) 720' North
16. No. of Acres in lease 2280
17. Spacing Unit dedicated to this well 160 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1938' from #6A
19. Proposed Depth 4770' TVD
20. BLM/BIA Bond No. on file UT0719
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5735' G.L.
22. Approximate date work will start* September 15, 2002
23. Estimated duration 15 days
24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) Joe Dyk	Date 6/5/02
Title Petroleum Engineer	Name (Printed/Typed) BRADLEY G. HILL	Date 12-30-02
Approved by (Signature) 	Office ENVIRONMENTAL SCIENTIST III	

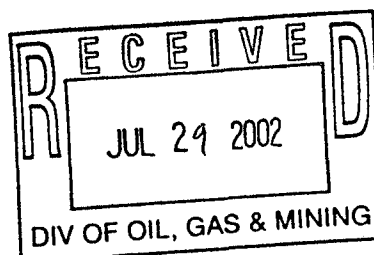
Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

T 4354973 Y 39.33301
650296 X -109.25421

B 4355073 Y 39.33394
650117 X -109.25826



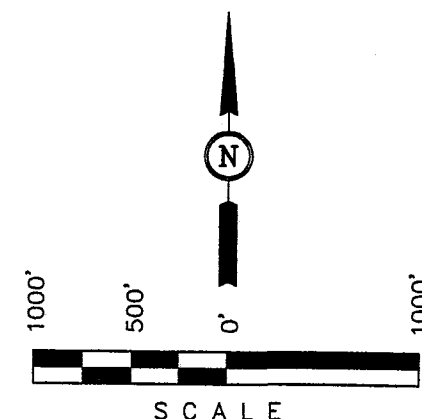
T17S, R24E, S.L.B.&M.

LONE MOUNTAIN PRODUCTION

Well location, BRYSON CANYON UNIT #19, located as shown in the NE 1/4 NE 1/4 of Section 16, T17S, R24E, S.L.B.&M. Grand County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT A ROAD INTERSECTION LOCATED IN THE NW 1/4 OF SECTION 15, T17S, R24E, S.L.B.&M. TAKEN FROM THE DRY CANYON QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5685 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert L. Kay
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 5-22-02

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 4-24-02	DATE DRAWN: 4-26-02
PARTY J.F. J.J. C.G.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE LONE MOUNTAIN PRODUCTION	

80.00 (G.L.O.)

89°55' (G.L.O.)
1925 Brass Cap,
1.0' High, Pile
of Stones

929' (Comp.)
11'

BRYSON CANYON UNIT #19
Elev. Ungraded Ground = 5735'

PROPOSED WELL HEAD BEARS S0°37'17"W
929.22' FROM THE NORTHEAST CORNER
OF SECTION 16, T17S, R24E, S.L.B.&M.

16

1925 Brass Cap,
1.5' High, Pile of
Stones

N00°04'07"W - 2633.66' (Meas.)
N00°02'W - 40.00 (G.L.O.)

WEST - 80.10 (G.L.O.)

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(AUTONOMOUS NAD 83)

LATITUDE = 39°19'58.62" (39.332950)

LONGITUDE = 109°15'24.68" (109.256856)

Application for Permit to Drill
Bryson Canyon Unit No. 19
NENE Section 16, T17S-R24E
Grand County, Utah

1. Surface formation is the Mesa Verde
2. Anticipated Geologic Markers: Mesa Verde at surface, Castle gate at 723', Mancos shale at 763', Dakota Silt at 4198', Dakota at 4298', Total Depth at 4798'. All depths true vertical depth.
3. Gas is anticipated in the Dakota. No water sands are expected.

4. Proposed casing program:

<u>Hole size</u>	<u>Casing size</u>	<u>Depth</u>	<u>Cement</u>
12.25"	8-5/8" 24 lb K55 STC	800 feet	cemented to surface
7.875"	4-1/2" 11.6 lb K55 STC	4871 feet MD	225 sacks 10-2 thixo

From 1.18 15.6ppg
50% excess
14.1 ppg 1.40 yield
meddyk 12/17/02

5. Pressure Control equipment: See attached Well Control Plan and schematic of contractor's BOP stack. BOP's will be tested prior to drilling out from surface casing and checked daily.
6. Air or mist drilling will be used to drill the 12-1/4" surface hole and 8-5/8" casing will be set and cemented to surface with a rat hole rig. Then the drilling rig will be moved in to mud drill out under the surface casing. The mud will be water based low solids and non-dispersed.
7. Auxiliary Equipment: See Well Control Plan.
8. The electric logging program will consist of a DIL log from TD to the base of the surface casing and GR-CNL-FDC log from TD to 200' above the Dakota silt. No cores or drill stem tests are planned.
9. No abnormal pressures or temperatures are anticipated. No poisonous gas is anticipated.
10. Anticipated spud date is September 15, 2002. Completion operations should commence within 30 days of drilling rig release.
11. Survey plats are attached.
12. The gas is not dedicated at this time.
13. Lone Mountain Production Co.'s Statewide Bond is UT0719.
14. The completion program will be designed after the logs have been evaluated.

RECEIVED

AUG 05 2002

DIVISION OF
OIL, GAS AND MINING

SURFACE USE PLAN

Lone Mountain Production Company
Bryson Canyon Unit No. 19
NENE Sec. 16, T17S-R24E
Grand County, Utah

1. EXISTING ROADS

This proposed well is located 33 miles northwest of Mack, Colorado. From Interstate 70 in Utah at Exit 225 (Westwater Exit) proceed two miles north and east. Turn left and proceed 5.6 miles north and west to a tee in the road. Turn left at the tee and follow signs to East Canyon (6.8 miles). Turn right and go 4.7 miles up East Canyon. Turn left and go 1000 feet to new well location.

2. NEW ROADS

A cultural survey has been performed on the new road and location area.

3. LOCATION OF EXISTING WELLS

There are 8 wells within a one-mile radius. There are 2 dry holes within a one-mile radius.

4. LOCATION OF PRODUCTION FACILITIES

Upon completion of the well as a producing gas well, sufficient facilities to handle gas production will be installed. This includes a heated separator, a meter run and an evaporation pit constructed with an 8' dia. Culvert buried 8' in the ground. A submittal in accordance with Onshore Order #7 will be completed at that time. All facilities will be painted Pinyon Green to blend in with the natural surroundings.

5. LOCATION AND TYPE OF WATER SUPPLY

Water will be hauled from the Ute water tap located in Mack, Colorado.

6. SOURCE OF CONSTRUCTION MATERIALS

No construction materials will be used other than native materials. Soils from cuts will be used as fills and excess soil will be stockpiled on the south and southeast sides of the location. Only upon completion will outside material be brought in if deemed necessary for production operations.

7. METHODS FOR HANDLING WASTE MATERIALS

Cuttings will be buried in the reserve pit at cleanup. Garbage and other waste material will be contained in a trash cage, which will be dumped at an approved sanitary land fill. Human waste will be contained in chemically treated portable toilets.

Drilling fluids will be contained in the reserve pit and left to dry out before reclamation of the pit. Flow back from completion operations will also be contained in the reserve pit. Oil will not be put in the reserve pit.

If the well is productive, produced water will be disposed on site for 30 days or 90 days with the permission of the State Petroleum Engineer. After that time, application will be made for the approval of a permanent disposal method in compliance with the rules and regulations of the State of Utah and Onshore Order No. 7.

8. ANCILLARY FACILITIES

Approximately 150 feet of 3" steel surface pipeline will be lain on the north end and off the location to tie into an existing pipeline across the wash. This pipeline belongs to Canyon Gas Gathering Company.

9. WELLSITE LAYOUT

See plat #2 - Pit and pad layout

See plat #3 - Cross sections of pit and pad

This location will be constructed large enough to accommodate the drilling rig and associated equipment with allowance made for future completion and production equipment.

Brush and trees will be stripped and stockpiled on the north west edge of the location for use as cover for future reclamation. No topsoil stripping will be done.

The reserve pit will be fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished.

All construction activities will be confined to the minimum area necessary. The exterior boundaries of the construction area will clearly marked prior to any surface disturbing activities or vegetation removal.

10. PLANS FOR RECLAMATION OF THE SURFACE

A biodegradable mulch may be required if soil erosion or vegetation establishment is determined to be a problem by the authorized officer on the access or location reclamation.

All disturbed areas will be seeded with the approved seed mixture. Seed tags will be submitted to the area manager within 30 days of seeding.

Seed bed will be prepared by contour cultivating 4 - 6" deep and drilling seed ½ to 1" deep following the contour. In areas that cannot be drilled, seed will be broadcast at 1.5 times the application rate and then dragged for cover.

Seeding will be completed after September 15, 2002 and prior to October 31, 2002, if feasible, but no later than the fall of 2003.

If the well is a producer:

Lone Mountain will upgrade and maintain access roads as necessary to prevent soil erosion and accommodate year round traffic. Areas unnecessary to production operations will be reshaped, cultivated on the contour, and seeded with the approved seed mixture with a drill ½ to 1" deep. Areas where seed cannot be drilled will be broadcast seeded at 1.5 times the approved application rate and dragged for seed cover. The topsoil will be saved for use during final reclamation unless the site can be re-contoured to blend with the natural topography as required for the final abandonment. Perennial vegetation will be established. Additional work will be required in the case of seeding failures. All permanent facilities will be painted Pinyon green to blend with the natural environment.

If the well is abandoned/dry hole:

Lone Mountain will restore the access road and location to blend with the natural topography. During reclamation of the site, fill material will be pushed into cuts and up over the back slope. No depressions will be left that could trap water or form ponds. The location will be seeded according to the approved seed mixture.

The area will be considered to be satisfactorily reclaimed when:

- a) Soil erosion resulting from the operation has been stabilized.
- b) A vegetative cover at least equal to that present prior to disturbance and a plant species composition at least desirable as that present prior to disturbance has been established. Establishment of seeded species in the approved seed formula will be considered as acceptance.

Additional work will be required until these conditions are satisfied.

11. SURFACE OWNERSHIP

All lands involving new construction are within the Bryson Canyon Unit and are administered by the BLM. Section 16 is a state section and a portion of the well pad will be in section 15 which is federal surface.

12. NOTIFICATIONS

Lone Mountain will contact the Grand Resource Area Manager at least 24 hours prior to commencing construction or maintenance of the access road and/or well pad.

Lone Mountain will immediately bring to the attention of the Grand Resource Area Manager any and all antiquities or other objects of historic or prehistoric ruins, artifacts, or fossils discovered as a result of operations under this permit. Lone Mountain will immediately suspend all activities in the area of the object and will leave such discoveries intact until told to proceed by the area manager. Notice to proceed will be based upon the evaluation of the cultural significance of the object. Evaluation will be by a qualified professional selected by the Area Manager from a federal agency insofar as practical. When not practical, Lone Mountain will follow the mitigation requirements set forth by the area manager concerning protection, preservation, or disposition of any sites or material discovered. In those situations where the area manager determines that data recovery and/or salvage excavations are necessary, Lone Mountain will bear the cost of such data recovery and/or salvage operations.

The Grand Resource Area Manager will be notified at least 24 hours prior to commencing reclamation work.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVES AND CERTIFICATION

Joel V. Dyk
Petroleum Engineer
1360 Highway 6 & 50
Loma, Colorado 81524
Office Phone: (970) 858-7546
Cell Phone: (970) 250-9770

Jim Routson
Lone Mountain Production Company
P. O. Box 80965
Billings, Montana 59108-0965
Office Phone: (406) 245-5077
Cell Phone: (406) 855-9485

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Lone Mountain and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

June 6, 2002
Date

Joel V. Dyk
Joel V. Dyk, Petroleum Engineer

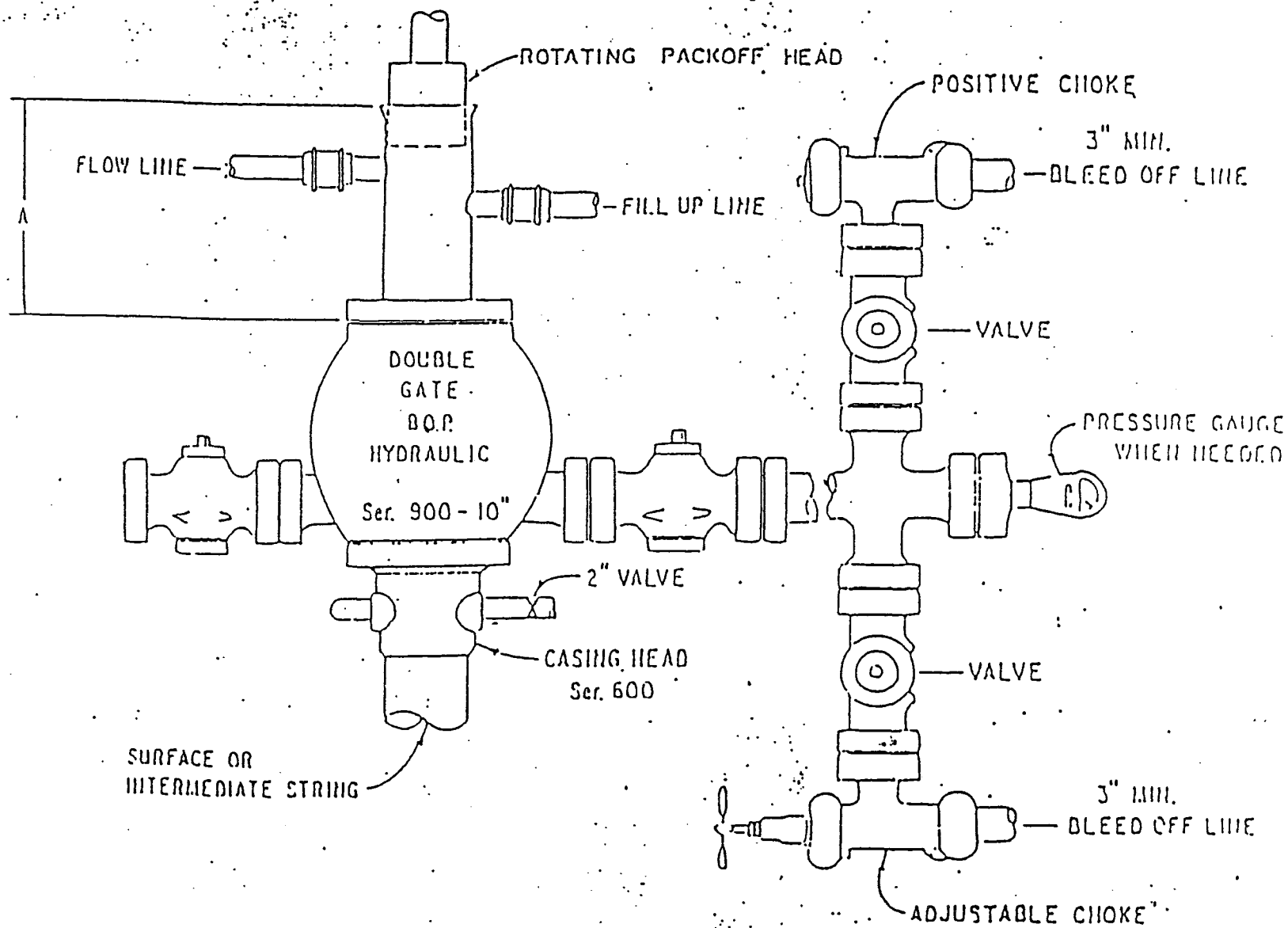
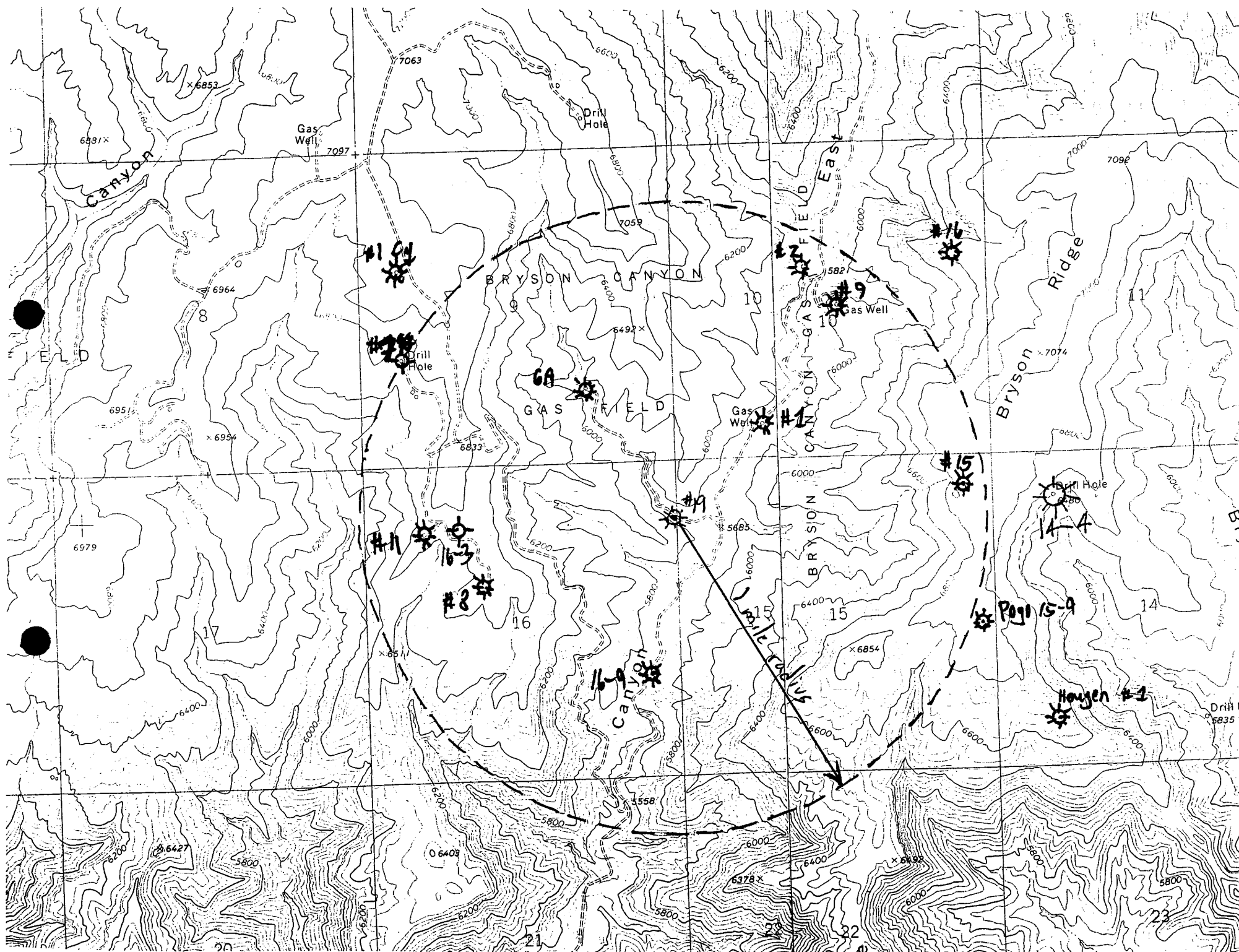


EXHIBIT I
 BLOWOUT PREVENTER DIAGRAM



LONE MOUNTAIN PRODUCTION
BRYSON CANYON UNIT #19
LOCATED IN GRAND COUNTY, UTAH
SECTION 45, T17S, R24E, S.L.B.&M.

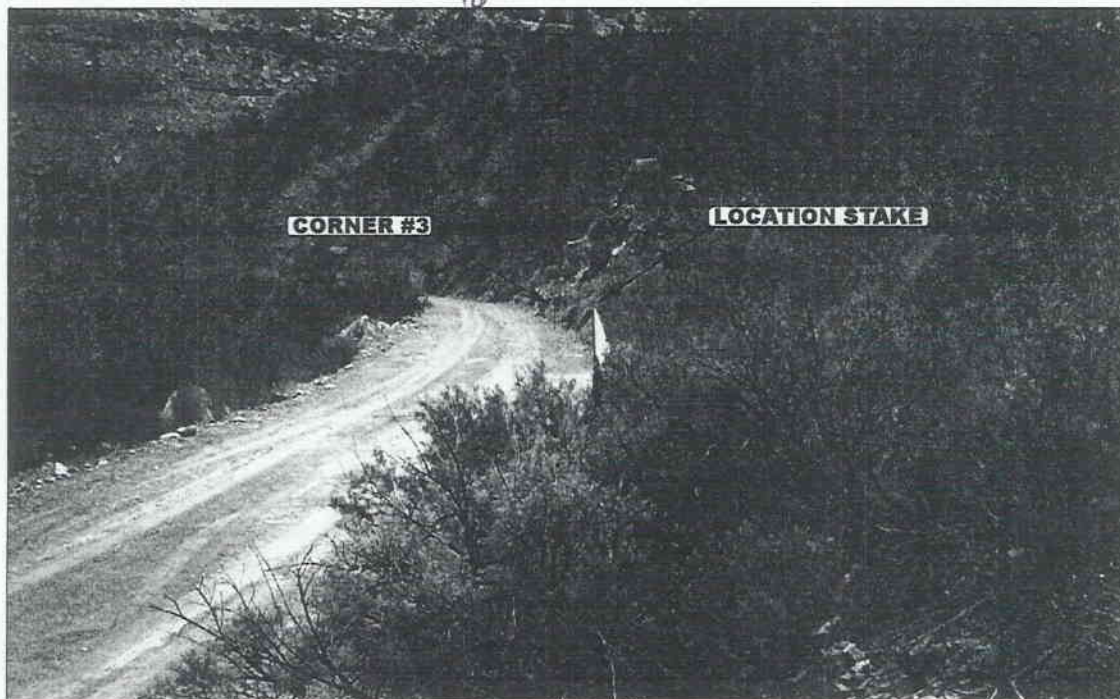


PHOTO: VIEW FROM LOCATION STAKE TO CORNER #3

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM EXISTING ROAD TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



- Since 1964 -

UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

4 29 02
MONTH DAY YEAR

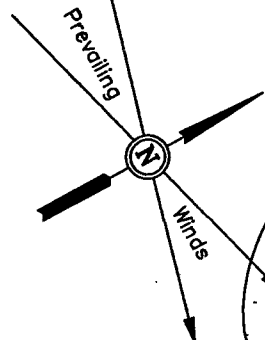
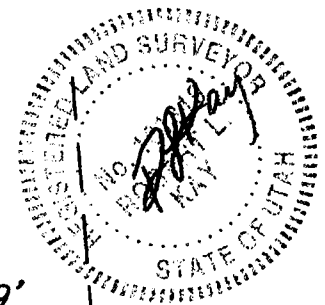
PHOTO

TAKEN BY: J.F. DRAWN BY: J.L.G. REVISED: 5-22-02

LONE MOUNTAIN PRODUCTION

LOCATION LAYOUT FOR

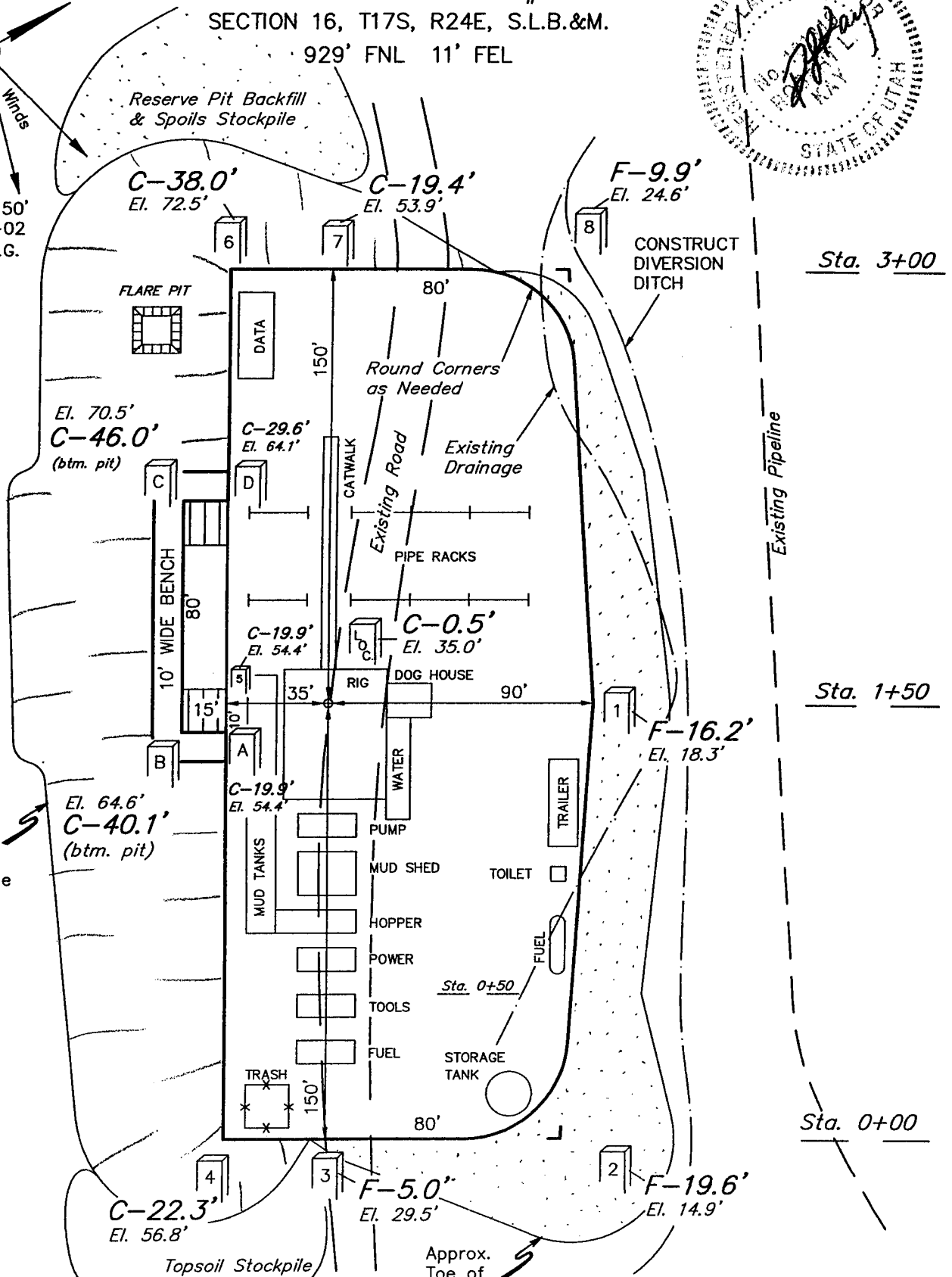
BRYSON CANYON UNIT #19
SECTION 16, T17S, R24E, S.L.B.&M.
929' FNL 11' FEL



SCALE: 1" = 50'
DATE: 5-22-02
Drawn By: C.G.

Total Pit Capacity
10' Deep W/2'
of Freeboard
= 1,330 Bbls.±
Total Pit Volume
= 360 Cu. Yds

Note:
Steeper Cut Slope
as Needed.



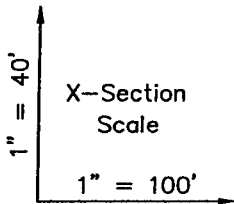
Elev. Ungraded Ground at Location Stake = 5735.0'
Elev. Graded Ground at Location Stake = 5734.5'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

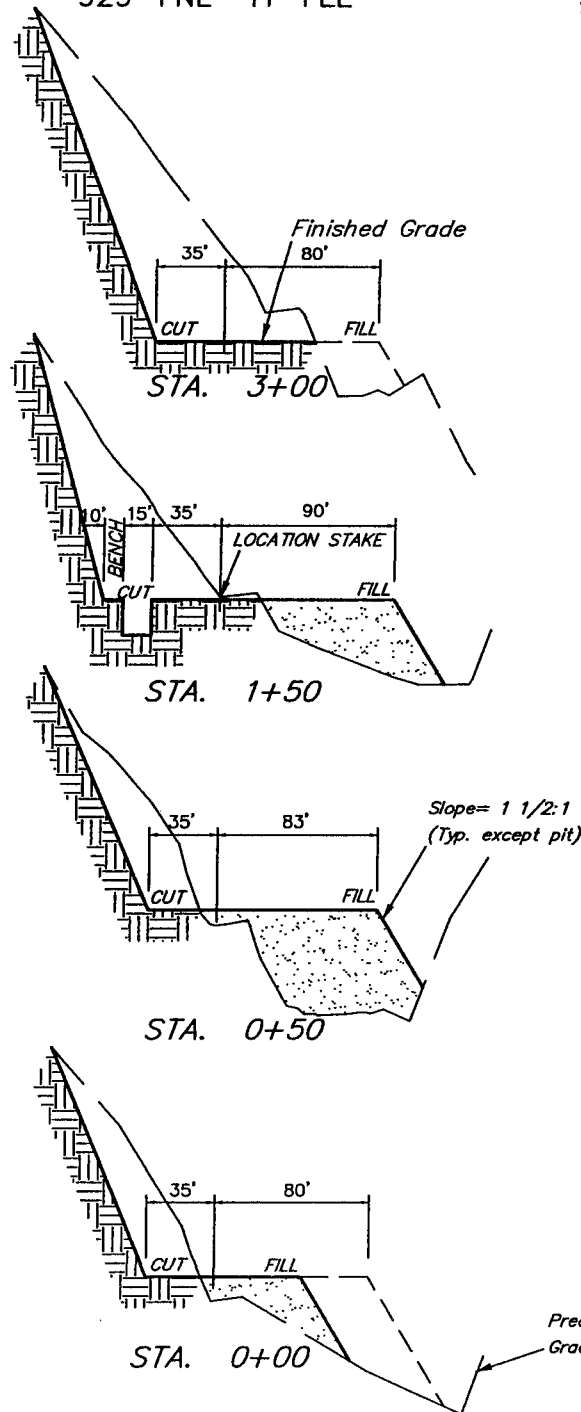
STONE MOUNTAIN PRODUCTION

TYPICAL CROSS SECTIONS FOR

BRYSON CANYON UNIT #19
SECTION 16, T17S, R24E, S.L.B.&M.
929' FNL 11' FEL



DATE: 5-22-02
Drawn By: C.G.



APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping = 710 Cu. Yds.

Remaining Location = 19,840 Cu. Yds.

TOTAL CUT = 20,550 CU.YDS.

FILL = 11,790 CU.YDS.

EXCESS MATERIAL AFTER
5% COMPACTION

= 8,140 Cu. Yds.

Topsoil & Pit Backfill
(1/2 Pit Vol.)

= 890 Cu. Yds.

EXCESS UNBALANCE
(After Rehabilitation)

= 7,250 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

T17S

PROPOSED LOCATION:
BRYSON CANYON UNIT #19

LOMA 37.1 MI. ±

0.2 MI. ±

R
24
E

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING ROAD



LONE MOUNTAIN PRODUCTION

BRYSON CANYON UNIT #19
SECTION 16, T17S, R24E, S.L.B.&M.
929' FNL 11' FEL



Utah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC		4	29	02
MAP		MONTH	DAY	YEAR
SCALE: 1" = 2000'		DRAWN BY: J.L.G.		REVISED: 5-22-02



WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 07/29/2002

API NO. ASSIGNED: 43-019-31392

WELL NAME: BRYSON CANYON U 19OPERATOR: LONE MTN PRODUCTION CO (N7210)CONTACT: JOE DYKEPHONE NUMBER: 406-245-5077

PROPOSED LOCATION:

NENE 16 170S 240E

SURFACE: 0929 FNL 0011 FEL

BOTTOM: 0600 FNL 0600 FEL

~~NENE~~ GRAND Sec 16 17S. 24E
BRYSON CANYON (185)

LEASE TYPE: 3 - State

LEASE NUMBER: ML 3323 OK

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: DKTA

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	12/27/02
Geology		
Surface		

LATITUDE: 39.33301

LONGITUDE: 109.25621

RECEIVED AND/OR REVIEWED:

- ☒ Plat
☒ Bond: Fed[] Ind[] Sta[3] Fee[]
(No. UTO719)
☒ Potash (Y/N)
☒ Oil Shale 190-5 (B) or 190-3 or 190-13
☒ Water Permit
(No. UTE WATER)
☒ RDCC Review (Y/N)
(Date:)
☒ Fee Surf Agreement (Y/N)

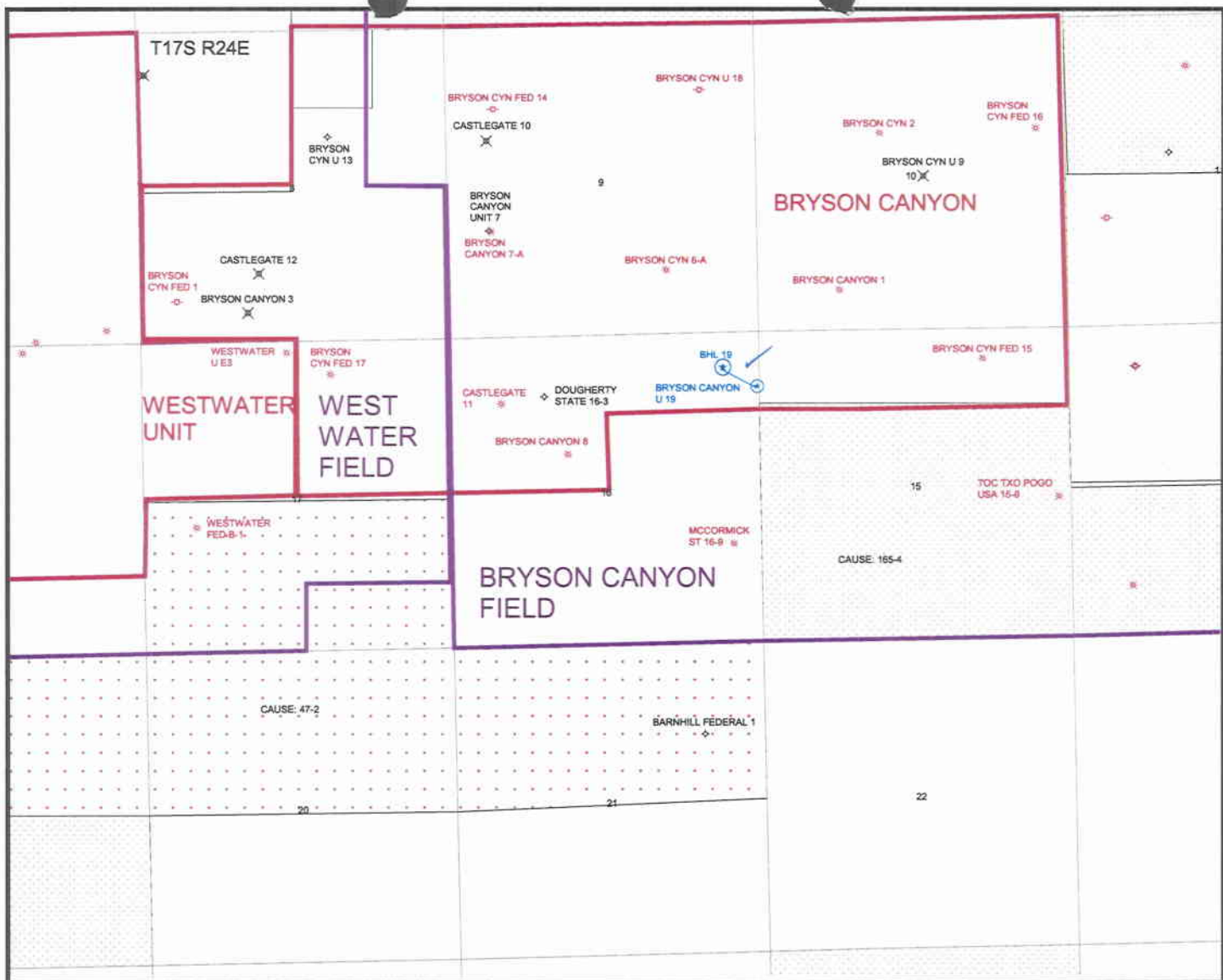
LOCATION AND SITING:

- ___ R649-2-3.
Unit BRYSON CANYON ☒
___ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
___ R649-3-3. Exception
___ Drilling Unit
Board Cause No: _____
Eff Date: _____
Siting: _____
☒ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS:

- 1- Federal Approval -
2- Spacing Strip
3- Directional Drilling Strip
4- BOPE shall be tested in accordance with R649-3-7 - Well Control (± 2000 psi)
5- STATEMENT OF BASIS



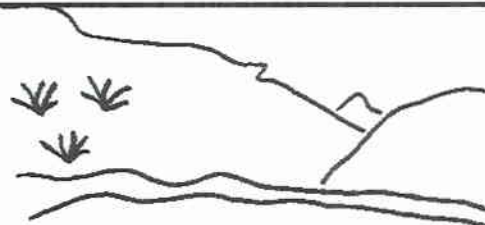
OPERATOR: LONE MTN PRODUCTION (N7210)

SEC. 16 T17S, R24E

FIELD: BRYSON CANYON (185)

COUNTY: GRAND

SPACING: R649-3-11 / DIRECTIONAL DRILLING



Utah Oil Gas and Mining

WELLS

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL

UNIT STATUS

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

FIELD STATUS

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED
- COUNTY BOUNDARY
- SECTION LINES
- TOWNSHIP LINES



PREPARED BY: DIANA MASON
DATE: 3-JANUARY-2003

**DIVISION OF OIL, GAS AND MINING
APPLICATION FOR PERMIT TO DRILL
STATEMENT OF BASIS**

OPERATOR: Lone Mountain Production Company
WELL NAME & NUMBER: Bryson Canyon unit #19
API NUMBER: 43-019-31392
LOCATION: 1/4,1/4 NENE Sec: 16 TWP: 17S RNG: 24E 600' FNL 600 FEL (bottom hole loc.)

Geology/Ground Water:

Lone Mountain proposes to set 800 feet of surface casing cemented to the surface. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of section 16. The surface formation at this location is listed as the Mesa Verde. The proposed location is located in a ground water recharge area for the Mesa Verde. The proposed surface casing will extend through the Mesa Verde and into the Mancos Shale. The proposed surface casing should adequately protect the Mesa Verde aquifer.

Reviewer: Brad Hill **Date:** 12-30-2002

Surface:

The BLM is the administrative agency over the ground surface at this location. The operator is responsible for obtaining any needed permits or rights of way before causing any surface disturbance.

Reviewer: Brad Hill **Date:** 12-30-2002

Conditions of Approval/Application for Permit to Drill:

None.

UTAH DIVISION OF WATER RIGHTS
WATER RIGHT POINT OF DIVERSION PLOT CREATED MON, DEC 30, 2002, 3:25 PM
PLOT SHOWS LOCATION OF 0 POINTS OF DIVERSION

PLOT OF AN AREA WITH A RADIUS OF 10000 FEET FROM A POINT
FEET, FEET OF THE NW CORNER,
SECTION 16 TOWNSHIP 17S RANGE 24E SL BASE AND MERIDIAN

PLOT SCALE IS APPROXIMATELY 1 INCH = 4000 FEET

N O R T H

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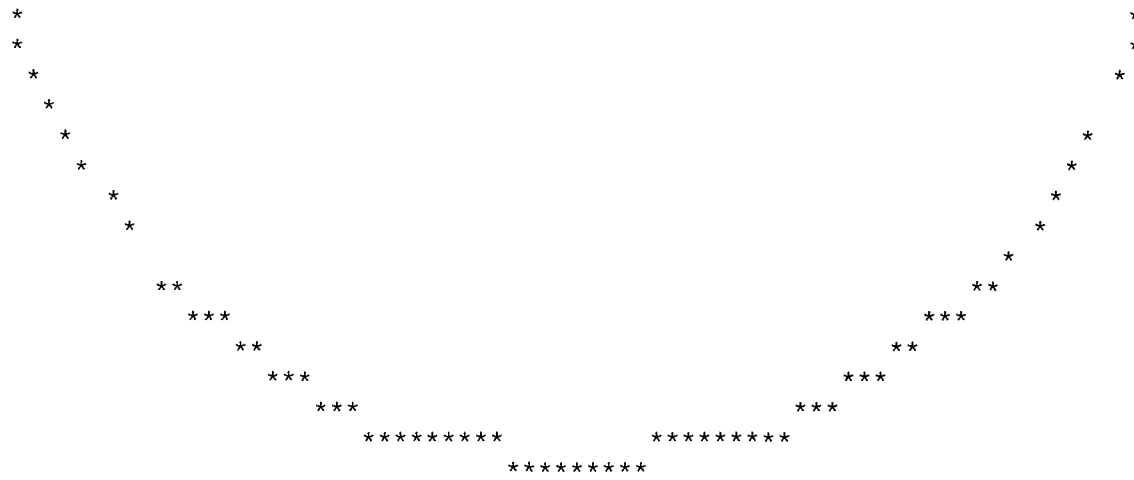
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1002 Lone Mountain Bryson Canyon Unit 19

Casing Schematic

Surface

Men Verde

723'
Castlegate 763'
8-5/8"
Mand
MW 8.4
Frac 19.3

TOC @
0.

w/15g wishout

Surface
800. MD
800. TVD

* BOP ^{testing} stop
* DX stop

BOP

$$(0.052)(90)(4770) = 2232 \text{ psi}$$

Gss

$$(0.12)(4770) = 572 \text{ psi}$$

$$\text{MASP} = 1660 \text{ psi}$$

* No testing pressure noted
shall be tested in accordance w/ R649-3-7
well control (70% = $\pm 200 \text{ psi}$)

3MBOPE Proposed

Adequate

Dred 12/27/02

4198'
Dakota Silt
4298'
Dakota

4-1/2"
MW 8.4

TOC @
3817.

w/10g wishout

Production
4871. MD
4770. TVD

Well name:

11-02 Lone Mountain Bryson Canyon Unit 19Operator: **Shenandoah Energy Inc.**String type: **Surface**

Project ID:

43-047-34622

Location: **Uintah County****Design parameters:****Collapse**

Mud weight: 8.400 ppg

Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No

Surface temperature: 65 °F

Bottom hole temperature: 76 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 450 ft

Cement top:

Surface**Burst**

Max anticipated surface pressure:

0 psi

Internal gradient: 0.436 psi/ft

Calculated BHP 349 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Non-directional string.

Re subsequent strings:

Next setting depth: 4,680 ft

Next mud weight: 8.400 ppg

Next setting BHP: 2,042 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 800 ft

Injection pressure 800 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	800	8.625	24.00	K-55	ST&C	800	800	7.972	38.5
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	349	1370	3.92	349	2950	8.45	19	263	13.70 J

708 = 2045 psi

Prepared by: Dustin K. Doucet
Utah Dept. of Natural ResourcesPhone: 801-538-5281
FAX: 801-359-3940Date: December 26, 2002
Salt Lake City, Utah**ENGINEERING STIPULATIONS:**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:

11-02 Lone Mountain Bryson Canyon Unit 19Operator: **Shenandoah Energy Inc.**String type: **Production**

Project ID:

43-047-34622

Location: **Uintah County****Design parameters:****Collapse**

Mud weight: 8.400 ppg

Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No

Surface temperature: 65 °F

Bottom hole temperature: 120 °F

Temperature gradient: 1.15 °F/100ft

Minimum section length: 1,500 ft

Cement top: 3,817 ft

Burst

Max anticipated surface pressure:

0 psi

Internal gradient: 0.436 psi/ft

Calculated BHP 2,082 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Directional Info - Build & Drop

Kick-off point 900 ft

Departure at shoe: 675 ft

Maximum dogleg: 3 °/100ft

Inclination at shoe: 0 °

Tension is based on air weight.

Neutral point: 4,272 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	4871	4.5	11.60	K-55	ST&C	4770	4871	3.875	112.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2082	4960	2.38	2082	5350	2.57	55	170	3.07 J

Prepared by: Dustin K. Doucet
Utah Dept. of Natural ResourcesPhone: 801-538-5281
FAX: 801-359-3940Date: December 27, 2002
Salt Lake City, Utah**ENGINEERING STIPULATIONS:**

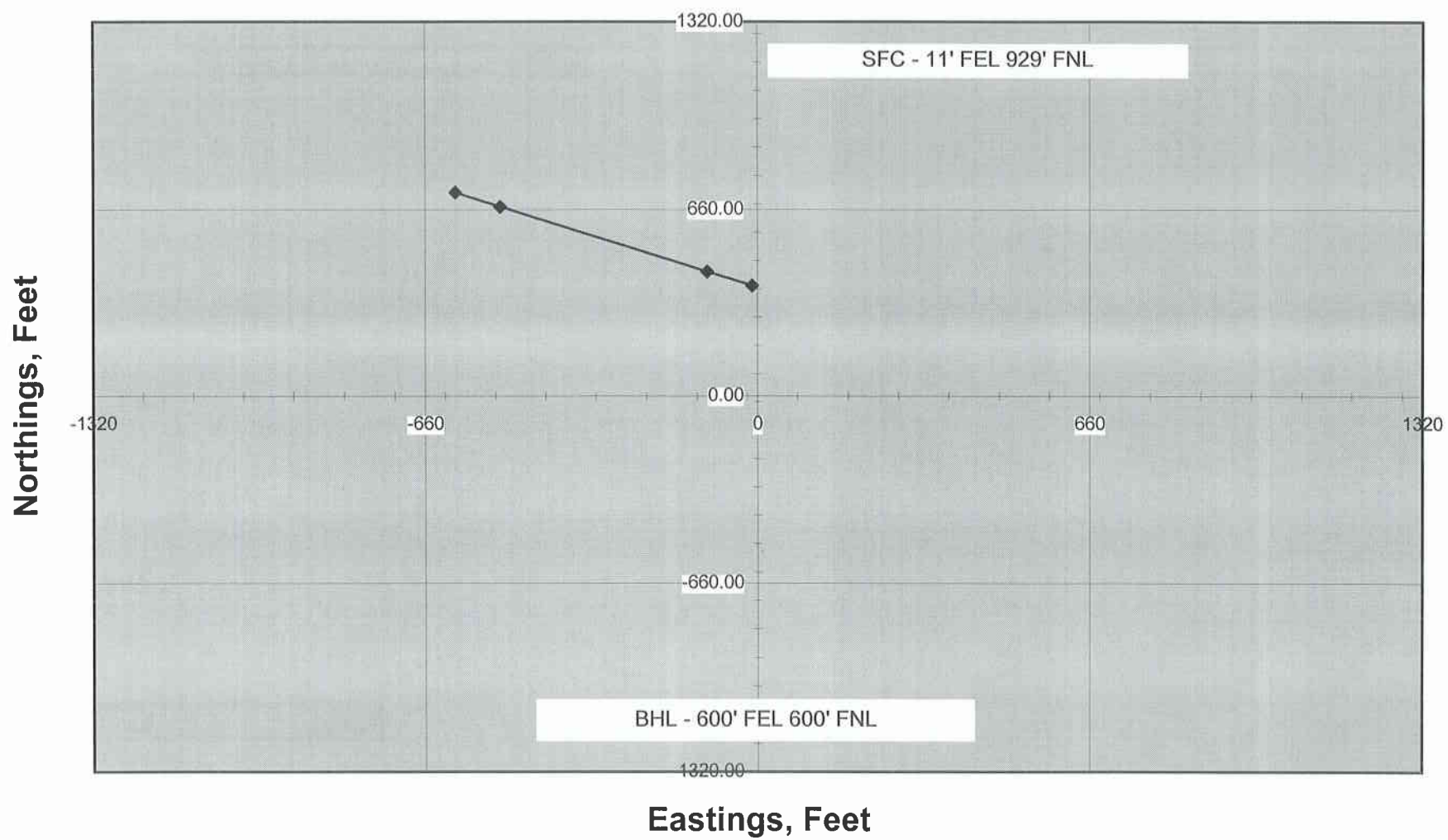
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

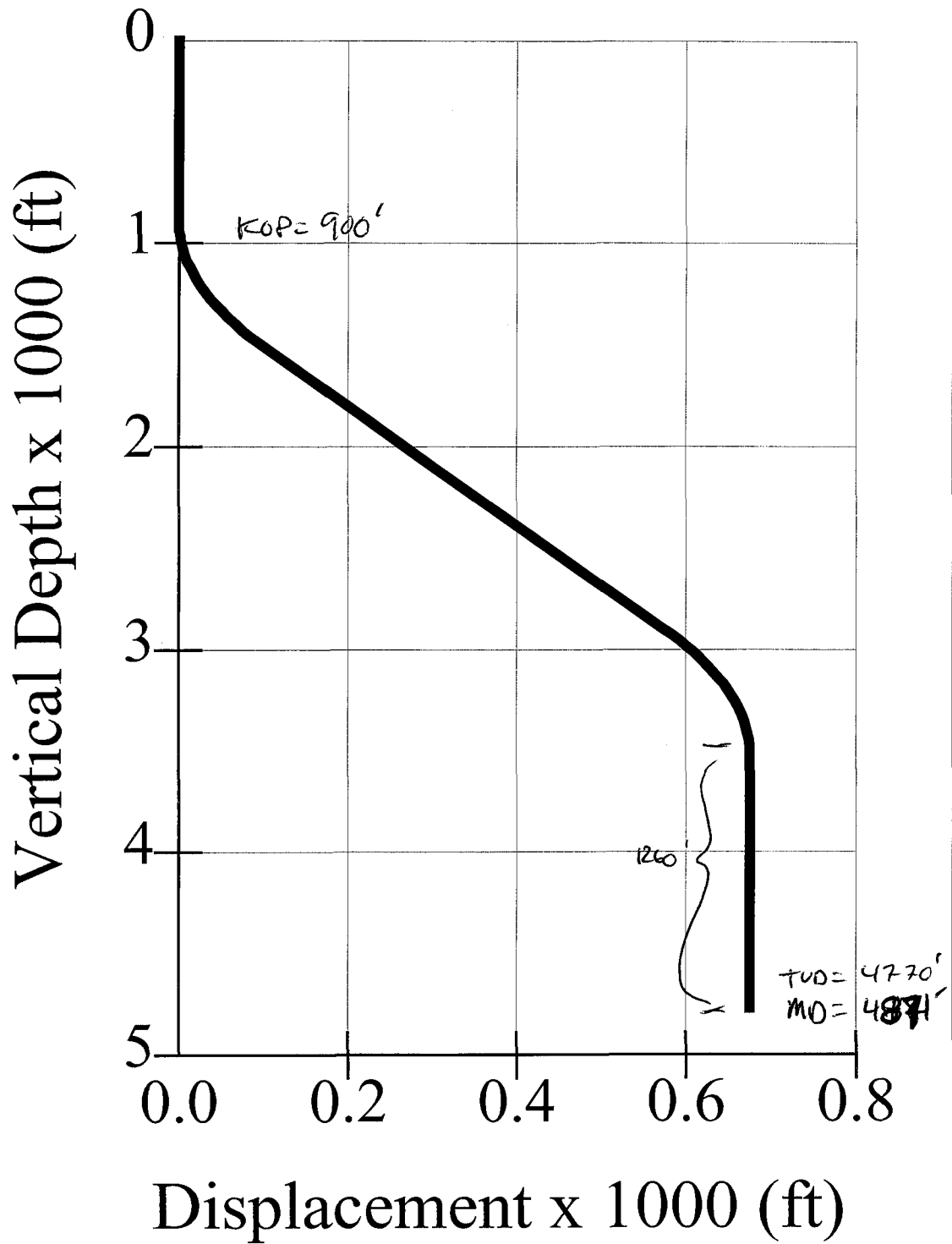
Engineering responsibility for use of this design will be that of the purchaser.

Plan View



Departure = 675'
 Azimuth = 299.19°
 Buildup $\angle = 3^\circ/100\text{ft}$
 Drop off $\angle = 3^\circ/100\text{ft}$
 KOP $\approx 800' \pm$
 BHL 600' FUL 600' FEL 521.6'

} per Joe Dyk
 12/17/2002





State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Robert L. Morgan
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

(801) 538-5340 telephone

(801) 359-3940 fax

(801) 538-7223 TTY

www.nr.utah.gov

December 30, 2002

Lone Mountain Production Company
P O Box 80965
Billings, MT 59108

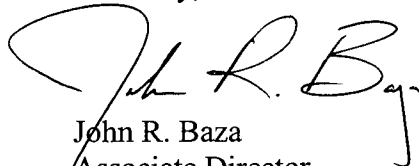
Re: Bryson Canyon Unit #19 Well, 929' FNL, 11' FEL, NE NE, Sec. 16, T. 17 South,
R. 24 East, Bottom Location 600' FNL, 600' FEL, NE NE, Sec. 16, T. 17 South,
R. 24 East, Grand County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-019-31392.

Sincerely,



John R. Baza
Associate Director

pb

Enclosures

cc: Grand County Assessor
SITLA
Bureau of Land Management, Moab Field Office

Operator: Lone Mountain Production Company
Well Name & Number Bryson Canyon Unit #19
API Number: 43-019-31392
Lease: ML 3323

Location: NE NE **Sec.** 16 **T.** 17 South **R.** 24 East
Bottom Location: NE NE **Sec.** 16 **T.** 17 South **R.** 24 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

5. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

7. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
8. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.



State of Utah

Department of
Natural Resources

Division of
Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

MICHAEL O. LEAVITT
Governor

OLENE S. WALKER
Lieutenant Governor

January 23, 2004

Carolyn Farmer
Lone Mountain Production Company
P O Box 80965
Billings, MT 59108

Re: APD Rescinded – Bryson Canyon U #19, Sec. 16, T. 17S, R. 24E
Grand County, Utah API No. 43-019-31392

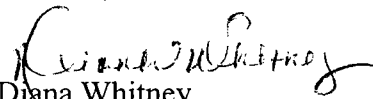
Dear Ms. Farmer:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on December 30, 2002. On January 23, 2004 you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective January 23, 2004.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,


Diana Whitney
Engineering Technician

cc: Well File
Bureau of Land Management, Moab
SITLA, Ed Bonner